



Abstract

A hitch ball assembly includes a mounting element secured to a vehicle and having an upright post with a cylindrical end portion provided with a key structure and a hitch ball that is keyed to be mated on that end portion in one rotational state. The hitch ball may be rotated to a second rotational state wherein the key structure is trapped in a cavity in the ball. A latch notch is provided in either the ball or the post, and a latch element is provided in the other of them. The latch element can move between a latch position to prevent rotation of the ball thereby to maintain engagement and an unlatch position to permit rotation and thereby separation of the ball from the post. A spring clip may be used to hold the latch element in the latch position.